L25

L26

L27 L28 (FILE 'HOME' ENTERED AT 11:45;47 ON 03 FEB 2007)

FILE 'CAPLUS, MEDLINE' ENTERED AT 11:45:58 ON 03 FEB 2007

FILE 'REGISTRY' ENTERED AT 11:46:01 ON 03 FEB 2007

E N-ACETYLGLUCOSAMINE/CN

L1 1 S E3

```
FILE 'CAPLUS, MEDLINE' ENTERED AT 11:47:18 ON 03 FEB 2007
          9442 S L1
L2
           232 S L2 AND MILK?
L3
             4 S L3 AND ?PASTEU?
L4
             5 S L2 AND PASTEURI?
L5
L6 '
             2 S L5 NOT L4
           40 S L2 AND BEVERAGE?
L7
             2 S L7 AND HEAT?
L8
            1 S L7 AND TEMPER?
L9
L10
           38 S L7 NOT L8
             0 S L10 AND MILLIGRAM?
L11
             6 S L10 AND MG
L12
           32 S L10 NOT L12
L13
             0 S L13 AND BIOMASS?
L14
             1 S L13 AND FUNG?
L15
             8 S L13 AND CHITIN?
L16
            24 S L13 NOT L16
L17
            1 S L17 AND FLOUR?
L18
             4 S L17 AND BAK?
L19
            20 S L17 NOT L19
L20
           12 S L2 AND SERVING?
L21
            0 S HEAT PASTEURI? (P) SWEETEN?
L22
          148 S PASTEURI? (P) SWEETEN?
L23
           33 S L23 AND BEVER?
L24
```

0 S L24 AND FUNG?

14 S L24 AND TEMP?

16 S L2 AND STERILI?

0 S L24 AND BIOMASS?

L12

L13

L14

L15

L16

L17

L18

L19

L20 L21

L22

L23

L24

L25

L26

L27

L28

(FILE 'HOME' ENTERED AT 11:45:47 ON 03 FEB 2007) FILE 'CAPLUS, MEDLINE' ENTERED AT 11:45:58 ON 03 FEB 2007 FILE 'REGISTRY' ENTERED AT 11:46:01 ON 03 FEB 2007 E N-ACETYLGLUCOSAMINE/CN 1 S E3 L1 FILE 'CAPLUS, MEDLINE' ENTERED AT 11:47:18 ON 03 FEB 2007 L29442 S L1 L3 232 S L2 AND MILK? L44 S L3 AND ?PASTEU? 5 S L2 AND PASTEURI? LŚ 2 S L5 NOT L4 L6 L7 40 S L2 AND BEVERAGE? L8 2 S L7 AND HEAT? L9 1 S L7 AND TEMPER? L10 38 S L7 NOT L8 L11

0 S L10 AND MILLIGRAM?
6 S L10 AND MG
32 S L10 NOT L12
0 S L13 AND BIOMASS?
1 S L13 AND FUNG?
8 S L13 AND CHITIN?
24 S L13 NOT L16
1 S L17 AND FLOUR?
4 S L17 AND BAK?
20 S L17 NOT L19
12 S L2 AND SERVING?
0 S HEAT PASTEURI? (P) SWEETEN?

33 S L23 AND BEVER?

0 S L24 AND FUNG?

14 S L24 AND TEMP?

16 S L2 AND STERILI?

0 S L24 AND BIOMASS?

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
L1
RN
     7512-17-6 REGISTRY
     Entered STN: 16 Nov 1984
ED
     D-Glucose, 2-(acetylamino)-2-deoxy- (9CI)
                                                 (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
    D-Glucose, 2-acetamido-2-deoxy- (8CI)
OTHER NAMES:
     2-Acetamido-2-deoxy-D-glucose
CN
     2-Acetamido-2-deoxyglucose
CN
     2-Acetamido-D-glucose
CN
     2-Acetylamino-2-deoxy-D-glucose
CN
CN
     Acetylglucosamine
CN
     D-N-Acetylglucosamine
     Marine Sweet
CN
     N-Acetyl-2-amino-2-deoxy-D-glucose
CN
     N-Acetyl-2-amino-2-deoxyglucose
CN
     N-Acetyl-D-glucosamine
CN
CN
     N-Acetylglucosamine
CN
     NSC 524344
FS
     STEREOSEARCH
     7132-76-5, 134-61-2, 173382-53-1, 98632-70-3
DR -
     C8 H15 N O6
MF
CI
     COM
                ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO,
LC
     STN Files:
       CA, CABA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NAPRALERT, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT7, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6443 REFERENCES IN FILE CA (1907 TO DATE)

482 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

6459 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:230126 CAPLUS

DOCUMENT NUMBER: 142:446265

TITLE: Chemical indicators of heat treatment in fortified and

special milks

AUTHOR(S): Mendoza, Maite Rada; Olano, Agustin; Villamiel, Mar

CORPORATE SOURCE: Instituto de Fermentaciones Industriales (CSIC),

Madrid, 28006, Spain

SOURCE: Journal of Agricultural and Food Chemistry (2005),

53(8), 2995-2999

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Carbohydrate and furosine contents in 12 com. fortified and special

milk samples (pasteurized goat's and ewe's milks
; ultrahigh-temperature (UHT) goat's milk, UHT milks

fortified with calcium, magnesium, fiber, or royal jelly and honey; and

lactose-hydrolyzed milks) were analyzed. Except for lactose-hydrolyzed milks, furosine, lactose, lactulose,

galactose, glucose, N-acetylgalactosamine, N-acetylglucosamine, and myo-inositol contents were similar to the previously reported values for

UHT or pasteurized milk samples. In

lactose-hydrolyzed milks, lactulose was not detectable and lactose was present in low amount; high levels of glucose, galactose, fructose, tagatose, and furosine were also detected in this type of milk. Results found in com. milks were compared to

milk. Results found in com. milks were compared to those obtained in laboratory-prepared UHT milks with lactose hydrolyzed prior to heating. Hydrolysis of lactose before thermal treatments promoted elevated accumulation of reducing sugars (galactose and glucose) that could be partially converted to the corresponding isomers (tagatose and fructose) during heating. In addition, the reducing sugars could also react with the amino groups of proteins, giving rise to the corresponding Amadori compound According to the obtained results, heating prior to hydrolysis of lactose is suggested to avoid a considerable loss of

available lysine.

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:868692 CAPLUS

DOCUMENT NUMBER:

137:381685

TITLE:

Cloning, characterization and sequences of PmHS and

PglA heparin/heparosan synthases from Pasteurella multocida and use of the

heparin/heparosan synthases for the production of

polymers

INVENTOR(S):

Deangelis, Paul L.

PATENT ASSIGNEE(S):

USA

SOURCE:

PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 25

PATENT INFORMATION:

PATENT NO.					KIND DATE				APPL	ICAT:		DATE						
WO 2002089742 WO 2002089742					A2 20021114 A3 20031023			WO 2002-US14581							20020508			
	W: AE, AG, AL, CO, CR, CU, GM, HR, HU,			CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	

```
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            EP 2002-725971
     EP 1392843
                         A2
                                20040303
                                                                   20020508
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            US 2001-289554P
                                                                P
                                                                   20010508
PRIORITY APPLN. INFO.:
                                            US 2001-296386P ·
                                                                Р
                                                                   20010606
                                                                P
                                            US 2001-303691P
                                                                   20010706
                                                                Р
                                            US 2001-313258P
                                                                   20010817
                                                                W
                                           WO 2002-US14581
                                                                   20020508
     The presently claimed and disclosed invention relates, in general, to dual
AB
     action heparin synthases and, more particularly, to dual action heparin
     synthases obtained from Pasteurella multocida. A dual action
     heparin/heparosan synthase encoded by a gene pmHS was identified in P.
     multocida. This enzyme is responsible for the polymerization of the glucuronic
     acid and N-acetylglucosamine. The nucleotide sequence of the P. multocida
     gene pmHS (clones A2 and B10) and the encoded amino acid sequence of the
     dual action heparin/heparosan synthase are disclosed. A gene with unknown
     function, called pglA was found in a genome sequencing project of type A
     P. multocida. It is disclosed in the present invention that the PglA
     enzyme is also a heparin synthase. This unexpected cryptic gene is
     functional in vitro in recombinant systems. The presently claimed and
     disclosed invention also relates to heparosan, heparin and heparin-like
     mols. provided by recombinant techniques and methods of using such mols.
     and also the identification or prediction of heparin synthases or
     component single action enzymes. The presently claimed and disclosed
     invention also relates to methods, and mols. produced according to such
     methods, for using the presently claimed and disclosed heparosan and/or
     heparin synthase for polymer grafting and the production of non-naturally
     occurring chimeric polymers incorporating stretches of one or more acidic
     GAG mols., such as heparin, chondroitin, hyaluronan, and/or heparosan.
    ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2001:312191 CAPLUS
DOCUMENT NUMBER:
                         135:75987
                         Influence of refrigeration and carbon dioxide addition
TITLE:
                         to raw milk on microbial levels, free
                         monosaccharides and myo-inositol content of raw and
                         pasteurized milk
AUTHOR (S):
                         Ruas-Madiedo, Patricia; De los Reyes-Gavilan, Clara
                         G.; Olano, Agustin; Villamiel, Mar
                         Instituto de Productos Lacteos de Asturias (CSIC),
CORPORATE SOURCE:
                         Villaviciosa, 33300, Spain
                         European Food Research and Technology (2000), 212(1),
SOURCE:
                         44-47
                         CODEN: EFRTFO; ISSN: 1438-2377
                         Springer-Verlag
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     The influence of CO2 treatment on free monosaccharides and myo-inositol in
     raw and pasteurized milk during cold storage was
     studied. Pasteurization did not cause significant changes in
     the monosaccharide fraction. No variations in the level of galactose and
    myo-inositol in untreated and CO2-treated samples were observed during cold
     storage. The content of glucose decreased considerably during cold
     storage due to bacterial growth in pasteurized milk.
    During cold storage of pasteurized milk no changes in
    N-acetylgalactosamine were observed, whereas N-acetylglucosamine decreased
```

considerably after 15 days. No differences between untreated and

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

CO2-treated milks were found. A substantial decrease in N-acetylglucosamine and a gradual increase in N-acetylgalactosamine were observed in raw milk during cold storage. The former was attributed to consumption of this hexosamine by microorganisms and the latter was probably due to microbial glycosidic enzymes. The addition of CO2 to raw milk proved to be a useful treatment for milk

preservation without modifying the free monosaccharide fraction.

REFERENCE COUNT: 23

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:128651 CAPLUS

DOCUMENT NUMBER: 124:173976

TITLE: Monosaccharides and myo-Inositol in Commercial

Milks

AUTHOR(S): Troyano, Esperanza; Villamiel, Mar; Olano, Agustin;

Sanz, Jesus; Martinez-Castro, Isabel

CORPORATE SOURCE: Instituto de Fermentaciones Industriales, Madrid,

28006, Spain

SOURCE: Journal of Agricultural and Food Chemistry (1996),

44(3), 815-17

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Monosaccharides (galactose, glucose, tagatose, 3-deoxypentulose, N-acetylglucosamine, and N-acetylgalactosamine) and myo-inositol were determined by gas chromatog. in different types of market milk (pasteurized, dried, UHT, and in-container sterilized). Glucose, myo-inositol, and N-acetylhexosamine concns. were similar to those previously found in raw milk and showed no variations due to sample type. Sterilized milk samples were characterized by the presence of tagatose and 3-deoxypentulose and, thus, could be clearly distinguished from UHT samples. The galactose level, which was found to be higher in the samples submitted to stronger thermal treatment, seems to be also a useful indicator for milk classification.

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:430722 CAPLUS

DOCUMENT NUMBER: 141:2334

TITLE: Polysaccharide over-producing Staphylococcii with

modified icaR gene and ica regulatory element, and

methods for treating staphylococcal infections INVENTOR(S): Pier, Gerald B.; Jefferson, Kimberly

PATENT ASSIGNEE(S): The Brigham and Women's Hospital, Inc., USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.					KIND DATE								DATE					
	10 2	2004	0434	07		A2	A2 20040527 A3 20050811			Ţ						2	0031	112	
.,				-					AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	ΝZ,	OM,	
	PG, PH, PL		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,			
	TR, TT, TZ					•	•	•			-								
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	•		CM,	-	-				-				TG
Α	U 2	20032	2908	67		A1			0603										
									0909										
Ε	P 1	15835	517			A2		2005	1012	2 EP 2003-783450					20	0031	L12		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	IE, SI, LT,			LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
PRIORI	PRIORITY APPLN. INFO.:										42556								
	•									1	NO 20	7- E O C	JS363	371	1	N 20	0031	L12	

The invention relates to nucleic acid sequences and related compns. for AB producing over-expression of the polysaccharide PNAG (poly-N-acetyl glucosamine), a polysaccharide antigen present on the surface of virulent strains of Staphylococci. PNAG may be isolated and formulated into vaccines or used to generate antibodies. Binding agents of the nucleic acids are also described. The invention also relates to diagnostic and therapeutic methods using the compns. It has been discovered that modifications to the intercellular adhesion (ica) locus result in altered production of PNAG. The invention relates to the discovery of transcriptional control mechanisms of the ica locus. The invention is premised in part on the identification of a 5 nucleotide motif within the ica promoter region which has a functional role in transcriptional regulation of the ica locus. This motif may function independently of IcaR protein. The invention is further premised in part on the observation that IcaR protein binds to the promoter region of the ica locus and that disruption of the icaR coding region results in over-production of polysaccharide as well as resultant biofilm.

```
ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
```

2004:412768 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 140:422798

TITLE: N-acetyl-D-glucosamine supplemented food products and

beverages

Rogers, Brent Daniel; Fosdick, Lawrence E.; Bohlmann, INVENTOR (S):

John Andrew

Cargill, Incorporated, USA PATENT ASSIGNEE(S): PCT Int. Appl., 45 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PA'				KIND DATE			APPLICATION NO.						DATE					
_	WO 2004041199 WO 2004041199				A2	20040521 20040923									2	0031	031	
	W:	AE, CN, GE, LK, NZ, TM, BW, BY, ES,	AG, CO, GH, LR, OM, TN, GH, KG, FI,	AL, CR, GM, LS, PG, TR, GM, KZ, FR,	AM, CU, HR, LT, PH, TT, KE, MD, GB,	AT, CZ, HU, LU, PL, TZ, LS, RU, GR,	AU, DE, ID, LV, PT, UA, MW, TJ,	AZ, DK, IL, MA, RO, UG, MZ, TM, IE,	BA, DM, IN, MD, RU, US, SD, AT, IT,	DZ, IS, MG, SC, UZ, SL, BE, LU,	EC, JP, MK, SD, VC, SZ, BG, MC,	EE, KE, MN, SE, VN, TZ, CH,	EG, KG, MW, SG, YU, UG, CY, PT,	ES, KP, MX, SK, ZA, ZM, CZ, RO,	FI, KR, MZ, SL, ZM, ZW, DE, SE,	GB, KZ, NI, SY, ZW AM, DK, SI,	GD, LC, NO, TJ, AZ, EE, SK,	ma.
	2003	2868	48		A1		2004	0607		AU 2		2868	48		2	0031	031	TG
US	US 2006003965 US 2006172392 US 2006178344				A1		2006		US 2005-533414 US 2006-394981 US 2006-395013						20060331			
PRIORIT	PRIORITY APPLN. INFO.:			.:					1	US 2	002 - 001 - 1 002 - 1	7856	95]	P 20 B1 20 A2 20	0010	216	
								1	US 2	002-: 003-: 003-:	6851	25	i	A2 20 A2 20 W 20		013		

AB Food products and beverages which include N-acetyl-D-glucosamine (NAG) are provided, as are methods of their preparation and use. Embodiments of the supplemented food products and beverages are heated to high temps., such as those used in pasteurization, without significant adverse effects on taste, color, odor and/or texture.

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:303190 CAPLUS

DOCUMENT NUMBER: 142:360864

TITLE: Effervescent and effervescent-dispersion compositions

for medicaments containing acid and base components

INVENTOR(S): Gonzales, Gilbert Rene; Gonzales, Nicholas L.

PATENT ASSIGNEE(S): Pediamed Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
DATE
                                   APPLICATION NO.
                                                          DATE
PATENT NO.
                 KIND
                          _____
                                     ______
                                                            _____
______
                  _ _ _ _
                                   US 2003-676408
WO 2005-US1571
                  A1
                          20050407
                                                            20031001
US 2005074489
                          20060727
                                                           20050120
                   A1
WO 2006078241
   W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
       CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
       GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
       LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
       NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
       SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
   RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
       IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
       CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
       KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
       KZ, MD, RU, TJ, TM
```

PRIORITY APPLN. INFO.: US 2003-676408

Pharmaceutical compns. comprising one or more medicaments in a pharmaceutically acceptable effervescent formulation are described. The effervescent formulation includes a first gas-dispersing component and a second gas-generating effervescent component, wherein at least one first gas is released from the first gas-dispersing component and at least one second gas is generated and evolved from the second gas-generating effervescent component, upon contact with a minimal amount of water. formulation is placed in an aqueous vehicle wherein the formulation effervescens gases causes penetration, dispersion and distribution of the medicaments in the vehicle. The vehicle, which may be any ordinary food or beverage chosen by the patient, is then ingested by the patient for delivery of a dosage of the medicaments. For example, an acetaminophen-containing effervescent-dispersion tablet was prepared comprising (i) a mixture of acetaminophen 14.05%, PVP 0.17%, and citric acid 14.05%, and (ii) an effervescent component containing sodium bicarbonate 47.77%, simethicone 0.14%, citric acid 14.05%, sodium carbonate 4.78%, and sugar 1.69%. To prepare the gas-dispersing component, glucose and corn was mixed and heated to 162°. The resulting mixture had a moisture content of about 2.5%. The mixture was placed in a Parr reactor (a thick-shelled pressure vessel) and stirred at temperature above 100° while maintaining its fused condition. Carbon dioxide gas under 600 psi pressure was admitted and the mixture was agitated for about 6 min. reactor was rapidly cooled to 25° and opened. The resulting product was hard and friable and contained about 4.5 mL of carbon dioxide/g product. This product was broken down into particles, screened through a 0.5 mm sieve mesh, and used in tableting.

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:412768 CAPLUS

DOCUMENT NUMBER: 140:422798

TITLE: N-acetyl-D-glucosamine supplemented food products and

beverages

INVENTOR(S): Rogers, Brent Daniel; Fosdick, Lawrence E.; Bohlmann,

John Andrew

PATENT ASSIGNEE(S):

Cargill, Incorporated, USA

SOURCE:

PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

11119

PATENT INFORMATION:

	PATENT NO.				KIND DATE		APPLICATION NO.						DATE						
			-			A2 20040521 A3 20040923				WO 2	2003-1	US34	846		2	0031	031		
PRIO	AU US US US	W: RW: 20032 20060 20061 20061	AE, CN, GE, LK, NZ, TM, BW, ES, TR, 2868- 0039- 1723- 1783-	AG, CO, GH, LR, OM, TN, GH, KG, FI, BF, 48	AL, CR, GM, LS, PG, TR, GM, KZ, FR, BJ,	AM, CU, HR, LT, PH, TT, KE, MD, GB, CF, A1 A1	AT, CZ, HU, LU, PL, TZ, LS, RU, GR, CG,	AU, DE, ID, LV, PT, UA, MW, TJ, HU, CI, 2004 2006	AZ, DK, IL, MA, RO, UG, MZ, TM, IE, CM, 0607 0105 0803	BA, DM, IN, MD, RU, US, SD, AT, IT, GA,	DZ, IS, MG, SC, UZ, SL, BE, LU, GN, AU 2 US 2 US 2 US 2 WO 2	BG, EC, JP, MK, SD, VC, SZ, BG, MC, GQ, 2005- 2006- 2006- 2002-	EE, KE, MN, SE, VN, TZ, CH, ML, GW, 28684 39493 39503 42313 78569 US253	EG, KG, MW, SG, YU, UG, CY, PT, ML, 48 14 31 19 95 121	ES, KP, MX, SK, ZA, CZ, RO, MR,	FI, KR, MZ, SL, ZM, DE, SE, NE, 20	GB, KZ, NI, SY, ZW AM, DK, SI, 00310 00504 00603 00213 00102	GD, LC, NO, TJ, AZ, EE, SK, TD, 031 429 331 101 216 807	TG
							1		2003 - 2003 -			į		0031	013				

AB Food products and beverages which include N-acetyl-D-glucosamine (NAG) are provided, as are methods of their preparation and use. Embodiments of the supplemented food products and beverages are heated to high temps., such as those used in pasteurization, without significant adverse effects on taste, color, odor and/or texture.

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:412768 CAPLUS

DOCUMENT NUMBER: 140:422798

TITLE: N-acetyl-D-glucosamine supplemented food products and

beverages

INVENTOR(S): Rogers, Brent Daniel; Fosdick, Lawrence E.; Bohlmann,

John Andrew

PATENT ASSIGNEE(S): Cargill, Incorporated, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: E FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PATENT NO.		KIND DATE			APPLICATION NO. '										
WO 2004041		A2	2			1		003-					0031	031	
	AG, AI	-					BB.	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
	CO, CF		•		•		-	-				-			
	GH, GM														
	LK, LR, LS														
	, PH,														
TM	, TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
RW: BW	RW: BW, GH, GM			MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
ву	KG, KZ	, MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
ES	FI, FF	, GB,	GR,	ΗU,	ΙE,	ΙT,	LU,	MC,	ΝL,	PT,	RO,	SE,	SI,	SK,	
	BF, BJ		•	•		•	•		•		•	•		-	TG
AU 2003286	348	A1	2	2004	0607	i	AU 2	003-	2868	48		2	0031	031	
US 2006003		A1		2006	0105	US 2005-533414						2	00504	429	
US 2006172	392	A1	2	2006	0803	US 2006-394981						2	00603	331	
US 20061783	344	A1	2	2006	0810	1	US 2	006-	3950	13		2	00603	331	
PRIORITY APPLN.	PRIORITY APPLN. INFO.:					1	US 2	002-	4231	19P		P 2	0021	101	
						1	US 2	001-	7856	95		B1 2	00102	216	
					Ī	WO 2	002-	US25	121		A2 2	0020	807		
					1	US 2	002-	3265	49		A2 2	0021	219		
						1	US 2	003-	6851:	25		A2 2	0031	013	
								003-1				W 2		-	

AB Food products and beverages which include N-acetyl-D-glucosamine (NAG) are provided, as are methods of their preparation and use. Embodiments of the supplemented food products and beverages are heated to high temps., such as those used in pasteurization, without significant adverse effects on taste, color, odor and/or texture.

L12 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1330533 CAPLUS

DOCUMENT NUMBER: 144:74811

TITLE: New dietary supplement composition for obesity and

inflammation

INVENTOR(S): Gokaraju, Ganga Raju; Gokaraju, Rama Raju;

Gottumukkala, Venkata Subbaraju; Somepalli,

Venkateswarlu

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2005282772 A1 20051222 US 2005-155486 20050620

PRIORITY APPLN. INFO.: US 2004-580723P P 20040621

AB The present invention relates to dietary supplement phytochem. comprising calcium, potassium double salt of (-)-hydroxycitric acid and glucosamine hydrochloride, and optionally boswellic acids, curcuminoids

The present invention relates to dietary supplement phytochem. compns., comprising calcium, potassium double salt of (-)-hydroxycitric acid and glucosamine hydrochloride, and optionally boswellic acids, curcuminoids, 5-hydroxytryptophan, chondroitin sulfate and L-carnitine. The claimed compns. are useful in dietary supplements, nutritional supplements or pharmaceutical prepns. for weight loss and inflammatory epidemics. A phytochem. composition was prepared by mixing unit doses of the following components: calcium, potassium double salt of (-)-hydroxycitric acid (4 g), glucosamine hydrochloride (1.5 g) and boswellic acids (300 mg).

L12 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:291173 CAPLUS

DOCUMENT NUMBER: 140:309006

TITLE: Kits for treatment of dry skin and skin-moisturizing

method

INVENTOR(S): Takahashi, Minako; Sakurai, Akihito; Okada, Kaori;

Ono, Erihi

PATENT ASSIGNEE(S): Fancl Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE _____ ---------_____ JP 2002-270731 20020917 JP 2004107242 20040408 Α PRIORITY APPLN. INFO.: JP 2002-270731 The kits comprise topical formulations containing olive oil, squalane, minerals derived from seawater, Ser, sugar isomer mixts., and/or trimethylglycine and oral formulations containing ceramides, hyaluronic acid, silk peptides, glucosamine, glucosamine derivs., Gly, niacin, collagen, and/or collagen degradation products. Women were administered with a tablet (180 mg) containing Gly 7.5, ceramide 0.2, niacin 1.7, silk peptide 0.5, hyaluronic acid 0.6, N-acetylglucosamine 12.5, dextrin 35.0, cellulose 35.0, and rape oil powder 7.0 weight% once a day and treated with a cosmetic pack containing H2O 52.7, dextran 11.5, carboxyvinyl polymer 0.3, diglycerin 17.0, trimethylglycine 2.0, a sugar isomer mixture 0.5, maltitol 4.0, 1,3-butylene glycol 10.0, polyoxyethylene hydrogenated castor oil 0.5, CM-cellulose Na salt 1.4, and KOH 0.1 weight% three times a wk for 2 mo. Skin moisture content in the cheek was increased to 121-130% by the

combined treatment compared to that (100%) before treatment.

L12 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:596566 CAPLUS

DOCUMENT NUMBER: 139:122811

TITLE: Oral and buccal compositions containing

sourness-reducing agents

INVENTOR(S): Miura, Isamu; Matsushima, Hiroaki
PATENT ASSIGNEE(S): Rohto Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003221348	Α.	20030805	JP 2002-20648	20020129
PRIORITY APPLN. INFO.:			JP 2002-20648	20020129

OTHER SOURCE(S): MARPAT 139:122811

This invention relates to a method for decreasing sour taste of ingredients in oral or buccal dosage forms which comprises adding 2-amino-2-deoxy-D-glucose, N-acyl derivs., or salts thereof. For example, a chewable tablet contained ascorbic acid 500, 2-amino-2-deoxy-D-glucose hydrochloride 240, succinic acid tocopherol 100, riboflavin butyrate 12, nicotinamide 15, pyridoxine hydrochloride 50, aspartame 6, silica 30, Mg stearate 12, hydroxypropyl cellulose 24, and crystalline cellulose 211 mg.

L12 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:77538 CAPLUS

DOCUMENT NUMBER: 138:126991

TITLE: Method of skin care using oral N-acetylglucosamine
INVENTOR(S): Matahira, Yoshiharu; Saito, Michiko; Sugita, Nobuyuki

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.

Ser. No. 558,487.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2003022842	A1	20030130	US 2002-76686		20020214
US 6919306	B2	20050719			
JP 2001048789	Α	20010220	JP 1999-225245		19990809
US 2003003116	A1	20030102	US 2000-558487		20000425
PRIORITY APPLN. INFO.:			JP 1999-225245	Α	19990809
			US 2000-558487	A2	20000425

AB The present invention provides a method for skin care by orally administering a skin care agent comprising an ingestible carrier and natural-type N-acetyl-D-glucosamine (NAG) obtainable by hydrolysis of chitin with an acid, an enzyme, or an acid and an enzyme. The natural-type NAG is contained in an amount of 0.1-99.9% by weight, by which the moisture and tension of skin can be improved and the rough skin and fine wrinkles can be prevented or ameliorated. The skin care agent may be a skin care agent containing chitin oligosaccharide in an amount of 0.1-20% by weight

and natural-type NAG in an amount of 0.1-99.9% by weight; or a skin care agent containing collagen peptide in an amount of 0.1-99.9% by weight and natural-type

NAG in an amount of 0.1-99.9% by weight For example, tablets (300 mg /tablet) were prepared from granulation containing NAG 40%, collagen 30%, lactose 15%, cellulose 10%, citric acid 2%, perfume 2%, and sucrose fatty

ester 1%.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:87147 CAPLUS

DOCUMENT NUMBER: 136:123697

Blood flow improvers and thrombosis inhibitors TITLE:

comprising glucosamine

INVENTOR(S): Saito, Tatsuji; Sakamoto, Koji

Koyo Chemical Co., Ltd., Japan; Dainichiseika Color & PATENT ASSIGNEE(S):

Chemicals Mfg. Co., Ltd.

Eur. Pat. Appl., 9 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE			
EP 1175906	A1	20020130	EP 2001-116699	20010717			
EP 1175906	B1	20051109					
R: AT, BE, CH,	DE, DK	, ES, FR, GE	3, GR, IT, LI, LU, NL,	SE, MC, PT,			
IE, SI, LT,	LV, FI	, RO					
JP 2002097143	A	20020402	JP 2000-318354	20001018			
NO 2001003534	Α	20020121	NO 2001-3534	20010717			
US 2002032173	A1	20020314	US 2001-906770	20010718			
US 7001894	B2	20060221					
CN 1397282	Α	20030219	CN 2001-125452	20010718			
KR 2005079230	Α	20050809	KR 2005-56927	20050629			
PRIORITY APPLN. INFO.:			JP 2000-217983	A 20000718			
			JP 2000-318354	A 20001018			
			KR 2001-42900	A3 20010716			

Glucosamine salts and derivs. are effective for the improvement of blood AR flow, and hence, for the prevention and/or treatment of diseases caused by blood flow disturbances, such as thrombosis. Use of glucosamine salts or glucosamine derivs. as active ingredients can provide blood flow improvement, thrombosis prevention, and dietetic drinks or foods for the improvement of blood flow or for the prevention and/or treatment of thrombosis. Administration of glucosamine salts or glucosamine derivs. can improve blood flow and can prevent and/or treat thrombosis. Thus, a formulation contained erythritol 5, trehalose 1, glucosamine-HCl 1.5, cyclic and oligosaccharide 1.5 g, vitamins B1, B2, and B6 17 mg, flavor traces.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:114783 CAPLUS

DOCUMENT NUMBER: 134:168078

Skin care of food composition containing TITLE:

n-acetyl-glucosamine

Matahira, Yoshiharu; Saito, Michiko INVENTOR(S):

Yaizu Suisan Kagaku Industry Co., Ltd., Japan PATENT ASSIGNEE(S):

Eur. Pat. Appl., 17 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	TENT	NO.			KINI	D	DATE		AF	PL	ICAT	ION I	NO.		D.	ATE	
				-			-									-		
	ΕP	1075	836			A2		2001	0214	EF	2	-000	3035	23		2	0000	427
	ΕP	1075	836			A 3		2001	0425									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FΙ,	RO										
	JР	2001	0487	89		Α		2001	0220	JF	1:	999-	2252	45		1	9990	809
	TW	2539	05			В		2006	0501	TW	2	000-	8910	7810		2	0000	426
	CN	1283	413			Α		2001	0214	CN	2	-000	1082	63		2	0000	428
	HK	1034	648			A1		2005	0722	HK	2 (001-	1055	02		2	0010	808
	JР	2005	2110	78		Α		2005	0811	JF	2	005-	1062	62		2	0050	401
PRIOR	ITY	APP	LN.	INFO	. :		•			JF	1:	999-	2252	45	1	1	9990	809
								-							_ •			

AB The present invention provides a skin care agent comprising N-acetylglucosamine as an active ingredient. The skin care agent is preferably in the form of tablets, capsules, powder such as dust or granules, liquid or paste. The skin care agent of the present invention may be incorporated into foods such as confectioneries, powdered soup and beverages. By orally ingesting the skin care agent of the present invention, the N-acetylglucosamine as an active ingredient is rapidly absorbed, and by utilizing a part thereof as a starting material of acidic mucopolysaccharides such as hyaluronic acid or chondroitin sulfate, the moisture and tension of skin can be improved and the rough skin and fine wrinkles can be prevented or ameliorated. For example, a significant improvement in females with xeroderma and rough skin was observed by administration of N-acetylglucosamine tablets (200 mg/tablet, 5 tablets/day) for 8 wk, compared to females taking placebo of non-NAG-containing tablets.

> d l15 1 ibib abs

L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

1999:393971 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:29576

TITLE: Detection of chitin and diagnosis of fungal

infections using chitovibrin from Vibrio as a

chitin-binding lectin

Laine, Roger A. INVENTOR(S):

Board of Supervisors of Louisiana State University and PATENT ASSIGNEE(S):

Agricultural and Mechanical College, USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5914239	Α	19990622	US 1996-745881	19961108
US 6121420	Α	20000919	US 1999-290836	19990413
PRIORITY APPLN. INFO.:			US 1995-35112P P	19951115
			US 1996-745881 A	3 19961108

A 134 kDa, calcium-independent, chitin-binding lectin called chitovibrin is secreted by marine bacteria of the genus Vibrio. The secretion of chitovibrin is inducible by chitin or chitin-oligomers. Chitovibrin shows no apparent enzymic activity, but has a strong affinity for chitin and for chito-oligomers dp9 and larger. The protein has an isoelec. pH of 3.6, shows thermal tolerance, binds chitin with an optimum at pH 6 and is active in 0-4 M NaCl. Chitovibrin is useful as a stain for fungi and other chitin-containing organisms. Chitovibrin may be used to detect the presence of chitin, particularly in diagnosing fungal infections in humans, animals, and plant materials. Fungal infections are a particular problem in immunocompromised hosts such as AIDS patients and bone marrow transplant patients, because they can cause opportunistic infections. The chitovibrin diagnostic method allows the convenient, broad spectrum diagnosis of fungal infections in tissue samples or in body fluids. Other, smaller polypeptide fragments of chitovibrin will exhibit similar chitin-binding properties, and could be used in coupling to detection systems. 18

REFERENCE COUNT:

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L16 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1029393 CAPLUS

DOCUMENT NUMBER: 145:355581

Production method of N-acetylglucosamine containing TITLE:

> composition and foods and drinks containing n-acetylglucosamine containing composition Matahira, Yoshiharu; Watanabe, Kazuhiro

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 13pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006262752	Α	20061005	JP 2005-84077	20050323
PRIORITY APPLN. INFO.:			JP 2005-84077	20050323

The invention provides a production method of N-acetylglucosamine and AB N-acetylglucosamine containing composition obtained from the spray-dried N-acetylglucosamine sugar composition mixed with fish-derived collagens. Chitin is partially hydrolyzed with HCl, neutralized, desalted by electrodialysis with ion-exchanging membrane, subjected to glucosamine removal by adsorption with ion exchangers, incubated with enzymes to release N-acetylglucosamine, and spray-dried to get the

N-acetylglucosamine sugar composition The N-acetylglucosamine sugar composition

contains 80 - 90 weight % of N-acetylglucosamine and 1 - 20 weight % of chitooligosaccharides. The average mol. wts. of fish-derived collagens used are between 1,000 - 10,000. The ratios between N-acetylglucosamine or the N-acetylglucosamine sugar composition and the collages are 5 - 90 weight % of N-acetylglucosamine or N-acetylglucosamine sugar composition and 10 - 95 weight %

of collagens. Starch, dextrin, lactose and trehalose may be added to the N-acetylglucosamine sugar composition 0.01-30 Weight % of the N-acetylglucosamine

containing composition is used as additives to foods and beverages.

L16 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:677720 CAPLUS

DOCUMENT NUMBER: 145:102730

TITLE: Gelled beverages containing fish-derived collagen peptides and indigestible dextrin

Ishiwata, Tomoko; Okada, Mamoru; Tagata, Yoshisaku; INVENTOR(S):

Nakajima, Masatami

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006180812	Α	20060713	JP 2004-379402	20041228
PRIORITY APPLN. INFO.:			JP 2004-379402	20041228

The beverages, whose fish odor is masked, optionally contain AB chitin hydrolyzates, vitamin C, and/or vitamin B2. Thus, an orange-flavored gelled beverages, manufactured from H2O, indigestible dextrin, dextrin, Marine Matrix (collagen peptide), orange juice, hydrogenated maltose syrup, xylitol, agar, erythritol, vitamin B2 etc., had good texture and slight fish odor.

L16 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:266057 CAPLUS

DOCUMENT NUMBER: 144:460518

TITLE: Effects and safety of soy milk beverage

containing N-acetyl glucosamine on osteoarthritis
AUTHOR(S): Hatano, Kenji; Miyakumi, Yoichiro; Hayashida, Kenji;

Nakagawa, Satoshi

CORPORATE SOURCE: Takara Shuzo Co., Ltd., Japan

SOURCE: Japanese Pharmacology & Therapeutics (2006), 34(1),

149-165

CODEN: JPTABU

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

N-acetyl glucosamine is an amino sugar and a monomeric unit of chitin, a polysaccharide forming structural polymers in the exoskeletons of crustaceans. In humans, it exists in skin, cartilage and blood vessel as a component of hyaluronic acid, and bone tissue, cornea and aorta as a component of keratan sulfate. Osteoarthritis is one of the representative diseases, which disturb joint function and decrease the quality of life. One of the possible causes of osteoarthritis is decrease of amount of N-acetyl glucosamine in age, then feeding N-acetyl glucosamine could become its symptom better. In the present study, we assessed the effect and safety of a soy milk beverage containing N-acetyl glucosamine on osteoarthritis of knee joint, in the way of double-blind placebo-controlled, parallel group study. The subjects were 67 adults (male/female: 27/40, age: 54.3 ± 12.8), who felt slight pain, stiffness, and/or discomfort in their knee joints. They had never been treated the knee osteoarthritis by medication. The treatment group was given, once a day for 12 wk, the test beverage (200mL) containing 1000mg or more of N-acetyl glucosamine, and the control group was given the soy milk beverage without N-acetyl glucosamine. The results revealed that, the pain on going up and down the stairs and the pain at rest were significantly reduced in the treatment group compared with the placebo group at 8 wk. Range of motion (ROM) in the treatment group was also significantly improved compared with the placebo group at 8 wk. Blood examination, phys. examination and history taking did not reveal any adverse reactions of clin. importance. These results thus demonstrated that the long-term intake of the soy milk beverage containing N-acetyl glucosamine improves the subjective symptom and range of motion in subjects with slight pain, stiffness, and/or discomfort at knee joint.

L16 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:275427 CAPLUS

DOCUMENT NUMBER: 142:315332

TITLE: N-acetylglucosamine sugar composition preparation for

food additives

INVENTOR(S): Katsumi, Ryosuke; Okuno, Michiko

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2005080605 A 20050331 JP 2003-318145 20030910
PRIORITY APPLN. INFO.: JP 2003-318145 20030910

AB Chitin is partially hydrolyzed with HCl, neutralized, desalted by electrodialysis with ion-exchanging membrane, subjected to glucosamine

removal by adsorption with ion exchangers, incubated with enzymes to release N-acetylglucosamine, and spray-dried to get the

N-acetylglucosamine sugar composition The N-acetylglucosamine sugar composition has

lower sweetness and calorie than that of pure N-acetylglucosamine. It contains N-acetylglucosamine 80-90 weight% and chitooligosaccharides 10-20.

It is used as additive to beverages except milk

beverages. Dextrin, starch, lactose, and/or trehalose may be added to the N-acetylglucosamine sugar composition

L16 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:275426 CAPLUS

DOCUMENT NUMBER: 142:315689

TITLE: Storage-stable milk beverages with good

flavor and their use for treatment of osteoarthritis

INVENTOR(S): Matahei, Yoshiharu; Kikuchi, Kazuaki; Hatamoto,

Hitoshi; Ikesumi, Masahiro

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan; Mippon

Milk Community Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005080604	Α	20050331	JP 2003-318139	20030910
PRIORITY APPLN. INFO.:			JP 2003-318139	20030910

AB Title beverages contain 0.025-37.5 mass% sugar compns. containing

80-90 mass% N-acetylglucosamine (I) and 10-20 mass% chitin

oligosaccharide (II). Thus, low-fat milk composition containing 82:18 I-II mixture

(manufactured by hydrolysis of chitin and enzyme treatment of the oligosaccharide) showed efficacy in osteoarthritis.

L16 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:874165 CAPLUS

DOCUMENT NUMBER:

136:5158

TITLE:

Health drinking water.

INVENTOR(S):

Makino, Hideya; Muto, Masayuki

PATENT ASSIGNEE(S):

Yoshida, Isao, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

r. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001333750	Α	20011204	JP 2000-158080	20000529
PRIORITY APPLN. INFO.:			JP 2000-158080	20000529

AB The health drinking water contains mainly mineral water with the addition of glucosamine, chitosanoligosaccharide, N-acetylglucosamine, and chitinoligosaccharide.

L16 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:194762 CAPLUS

DOCUMENT NUMBER:

134:227409

TITLE:

Oral compositions containing grape polyphenols,

collagens, and chitin hydrolyzates

INVENTOR(S):

Teraoka, Keiko; Kawai, Yasuhiro

PATENT ASSIGNEE(S):

Sunstar, Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE -------------------20010321 JP 1999-252455 19990907 JP 2001072582 19990907 PRIORITY APPLN. INFO.: JP 1999-252455

This invention provides oral prepns. containing grape polyphenols, collagen hydrolyzates, and/or chitin hydrolyzates for the prevention and treatment of arthralgia, lumbago, and sciatica. The polyphenols include reveratrol derivs., catechins, and flavonols. A tablet contained N-acetylqlucosamine 10, reduced maltose syrup 20, lactose 17, sucrose fatty acid esters 3, and bovine collagen hydrolyzates (average mol. weight 3000)

q.s. to 100 %.

L16 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1999:393971 CAPLUS

DOCUMENT NUMBER:

131:29576

TITLE:

Detection of chitin and diagnosis of fungal infections using chitovibrin from Vibrio as a

chitin-binding lectin

INVENTOR(S):

Laine, Roger A.

PATENT ASSIGNEE(S):

Board of Supervisors of Louisiana State University and

Agricultural and Mechanical College, USA

SOURCE:

U.S., 10 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

18

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
	- -				
US 5914239	Α	19990622	US 1996-745881		19961108
US 6121420	Α	20000919	US 1999-290836		19990413
PRIORITY APPLN. IN	FO.:		US 1995-35112P	۰P	19951115
			US 1996-745881	A3	19961108

A 134 kDa, calcium-independent, chitin-binding lectin called AB chitovibrin is secreted by marine bacteria of the genus Vibrio. secretion of chitovibrin is inducible by chitin or chitin-oligomers. Chitovibrin shows no apparent enzymic activity, but has a strong affinity for chitin and for chito-oligomers dp9 and larger. The protein has an isoelec. pH of 3.6, shows thermal tolerance, binds chitin with an optimum at pH 6 and is active in 0-4 M NaCl. Chitovibrin is useful as a stain for fungi and other chitin-containing organisms. Chitovibrin may be used to detect the presence of chitin, particularly in diagnosing fungal infections in humans, animals, and plant materials. Fungal infections are a particular problem in immunocompromised hosts such as AIDS patients and bone marrow transplant patients, because they can cause opportunistic infections. The chitovibrin diagnostic method allows the convenient, broad spectrum diagnosis of fungal infections in tissue samples or in body fluids. Other, smaller polypeptide fragments of chitovibrin will exhibit similar chitin-binding properties, and could be used in coupling to detection systems.

REFERENCE COUNT:

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

2005:325523 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:372895

Low-sugar and low-flour food composition and TITLE:

> its manufacture Slilaty, George E.

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

LANGUAGE:

U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		- -	-		
	US 2005079247	A1	20050414	US 2003-683378	20031014
PRIO	RITY APPLN. INFO.:			US 2003-683378	20031014
AB	A food composition	include	s a base tha	t is not primarily of	flour and
	sugar, and a supple	ment (e	.g., vitamin	s, minerals, amino aci	ds, etc.).
	Thus, the base may	include	plant and g	rain proteins, fiber,	carbohydrat
	etc. Other base co	mponent	s may includ	e milk (or milk protei	ns) and egg

tes, g or egg derivs. The composition is functional as a substitute for traditional flour-and-sugar food products to mimic the organeoleptic properties of such traditional food products to thus provide the consumer with a product that is both tasty and pleasant in smell while simultaneously affording the consumer with a properly nutritious product to meet needed dietary requirements for a healthy lifestyle. Examples include muffins, doughnuts, pastas, pancakes and waffles. A method of making this food composition is also provided.

L20 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:182077 CAPLUS

DOCUMENT NUMBER: 142:284789

TITLE: Antiaging cosmetics containing antioxidants and

free-radical neutralizing agents and

antiinflammatories and collagen/fibrin boosting agents

INVENTOR(S): Gupta, Shyam K.

PATENT ASSIGNEE(S): Bioderm Research, USA

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005048008	A1	20050303	US 2003-604999	20030829
PRIORITY APPLN. INFO.:			US 2003-604999	20030829
				the problems

AB The present invention provides a comprehensive solution to the problems associated with natural topical aging via the incorporation of an extra-cellular antioxidant or free-radical neutralizing composition, with intra-cellular antioxidant or free-radical neutralizing composition, and anti-inflammatory composition, and collagen or fibrin boosting composition It

preferred to also have the above incorporated in a suitable carrier base or topical delivery system for skin, nail, and hair beneficial applications. For example, a shampoo composition contained sodium lauryl ether sulfate 35.0, water 55.4, cinnamidopropyl trimonium N-acetyl cysteinate 5.0, preservatives 0.5, Laureth-3 2.5, Rosmarinic acid 0.1, Darutoside

1.0, Niacinamide ascorbate 0.5%.

L20 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:738857 CAPLUS

DOCUMENT NUMBER:

141:230741

TITLE:

Skin anti-aging compositions and/or kit for

treatment/prevention of rough skin

INVENTOR(S):

Ono, Erika; Okada, Kaori Fancl Corporation, Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	- 			
JP 2004250372	, A	20040909	JP 2003-42219	20030220
PRIORITY APPLN. INFO.:			JP 2003-42219	20030220

AB The invention relates to a beverage composition characterized by containing skin-improving agent and alc. for treatment and/or prevention of skin aging and roughening. A kit for treatment/prevention of rough skin and skin aging consisting of the beverage and soybean germ. topical composition is also disclosed. Skin beautifying beverage containing gelatin hydrolyzate 2, soybean saponin 0.5, soybean isoflavon 0.5, ceramide 0.1, glucosamine 2, citric acid 4, plum liquor 36, brewing alc. 15, fructose 6, glucose 2, oligosaccharide 2, and water balance to 100 % was formulated.

L20 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:961116 CAPLUS

DOCUMENT NUMBER:

140:19850

Medicinal beverage and additive containing TITLE:

glucosamines

Martin, Kenneth A.; Barr, Teresa Leigh INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6660308	B1	20031209	US 2002-241542	20020911
US 6969533	B1	20051129	US 2003-630569	20030730
US 2004254095	A1	20041216	US 2003-725608	20031202
US 2004253295	A1	20041216	US 2003-725609	20031202
US 6900173	B2	20050531		
US 2004253227	A1	20041216	US 2003-725610	20031202
US 2004253296	A1	20041216	US 2003-725611	20031202
ORITY APPLN. INFO.:			US 2002-241542 A	12 20020911

The invention is a beverage made of a fluid and a one time daily dosage amount in an ingestible amount for treating an inflammatory tissue or arthritic condition in a mammal involving tissue that is underperfused tissue, inflamed joints, and inflamed muscle, wherein said dosage is a rapid absorbing large amount made of a glucosamine sulfate, a glucosamine hydrochloride, and an N-acetylglucosamine and combinations thereof, chondroitin sulfate, chondroitin-HCl and combinations, a vasodialating sulfonate with at least one Me group, and a buffer to reduce adverse symptoms from large amts. of glucosamine and chondroitin selected from the family of Araliaceae and a B3 vitamin.

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:610277 CAPLUS

DOCUMENT NUMBER:

139:143907

TITLE: INVENTOR(S): Cycloglycans for the treatment of mammalian infection Stahl, Bernd; Finke, Berndt; Schmitt, Joachim; Goebel,

Werner; Slaghius, Jorg; Boehm, Gunther

PATENT ASSIGNEE(S):

SOURCE:

N.V. Nutricia, Neth.

PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA:	CENT :	NO.			KIN	TAG C	E	1	APPL	ICAT	ION :	NO.		D	ATE	
															-		
	WO	2003	0638	82		A1	200	30807	1	NO 2	003-	EP50	5		2	0030	120
	WO	2003	0638	82		A8	200	41229									
		W:	AL,	CA,	CN,	ID,	JP, LT	, LV,	MK,	RO,	US						
		RW:	ΑT,	BE,	BG,	CH,	CY, CZ	, DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,
			ΙT,	LU,	MC,	NL,	PT, SE	, SI,	SK,	TR							
	DΕ	1020	3999			A1	200	30814	1	DE 2	002-	1020	3999		2	0020	201
	ΕP	1469	866			A 1	200	41027	1	EP 2	003-	7063	65		2	0030	120
		R:	ΑT,	ΒE,	CH,	DE,	DK, ES	, FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI, RO	, MK,	CY,	AL,	TR,	BG,	CZ,	EE,	ΗU,	SK	
	CN	1627	949			Α	200	50615	(CN 2	003-	8031	67		2	0030	120
	US	2005	2220	80		A1	200	51006	τ	JS 2	004-	5020	59		2	0040	802
PRIOR	RIT!	APP	LN.	INFO	. :				I	DE 2	002-	1020	3999		A 2	0020	201
									1	NO 2	003-	EP50	5		W 2	0030	120
					_		_	_	_	_					_		

The invention discloses the use of cycloglycans, in particular AB

homopolymeric cycloglycans with an annular base structure of 2 to 40 monosaccharides in the ring, for the prevention of the invasion and infection of mammalian cells by pathogens. The treatment of diseases caused by such pathogens and foodstuffs and dietetic and pharmaceutical

products comprising the above cycloglycans are also disclosed.

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:282111 CAPLUS

DOCUMENT NUMBER: 138:286531

Nutritional compositions, kits, and methods for TITLE:

promoting defined health benefits

INVENTOR(S): Kern, Kenneth norman; Heisey, Matthew Thomas

PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 586,213, abandoned.

CODEN: USXXCO .

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE		1	APPL	ICAT	ION 1	NO.		D.	ATE	
US	2003	0692	02		A1	-	2003	0410	1	US 2	001-	7602	80		. 2	0010	112
	2408				A 1		2001	1213	(CA 2	001-	2408	609		2	0010	601
WO	2001	09384					2001	1213	1	WO 2	001-	US17	714		2	0010	601
WO	2001	09384	47		A3		2002	0425									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
							DK,										
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	UΖ,	VN,
		YU,	ZA,	ZW,	SZ,	BE,	CY,	FR,	GR,	ΙE,	IT,	MC,	NL,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GΑ,	GN,	GW,	ML,	ΝE,	SN,	TD,	TG						
	RW:	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZW,	AT,	ΒE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
EP	1289	510			A2		2003	0312]	EP 2	001-	9460	30		2	0010	601
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
				•			RO,										
	2003															0010	
BR	2001	0113	81		Α		2003	1216								0010	
PRIORIT	Y APP	LN.	INFO	. :							000-						
							•				001-						
									I	WO 2	001-	US17	714			0010	601

The present invention is directed to compns. comprising: (a) a first AB component selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixts. thereof; and (b) a second component comprising: (i) a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. thereof; and (ii) an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the composition promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a composition as defined herein.

L20 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

2003:234866 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 138:384423

Optimization of the viability of probiotics in a new TITLE:

fermented milk drink by the genetic algorithms for

response surface modeling

Chen, M.-J.; Chen, K.-N.; Lin, C.-W. AUTHOR (S):

Dept. of Food Science and Technology, Deh-Yu Inst. of CORPORATE SOURCE:

Technology, Chi-lung, Taiwan

Journal of Food Science (2003), 68(2), 632-638 SOURCE:

CODEN: JFDSAZ; ISSN: 0022-1147

Institute of Food Technologists PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE:

Calcium gluconate (0.0 to 0.5%), sodium gluconate (0.0 to 1.0%), and N-acetylglucosamine (0.0 to 1.0%) were added to skim milk to retain the viability of Lactobacillus acidophilus and Bifidobacterium longum. To carry out response surface modeling, the regression method was performed on exptl. results to build math. models. The models were then formulated as an objective function in an optimization problem that was consequently optimized using a genetic algorithm approach to obtain the maximum viability of the probiotics. The genetic algorithms (GAs) were examined to search for the optimal value. The results indicated that GAs were very effective for

optimizing the activity of probiotic cultures. THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 26 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

2003:97264 CAPLUS ACCESSION NUMBER:

138:131114 DOCUMENT NUMBER:

Methods for treating joint inflammation, pain, and TITLE:

loss of mobility

McPeak, Patricia; Cheruvanky, Rukmini; Cherukuri, INVENTOR(S):

Reddy Sastry V.; Mazhar, Mohammed

PATENT ASSIGNEE(S):

Nutrastar, USA

PCT Int. Appl., 47 pp. SOURCE:

CODEN: PIXXD2 Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent :	NO.			KIN	D	DATE APPLICATION NO.						DATE				
								0030206 WO 2002-US23508						2	0020	723	
WO	2003	0097	41		A3		2003	0724									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ΒA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	·MX,	ΜZ,	NO,	NZ,	OM,	PH,
														TN,			
							YU,										
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
														TG			
US	2003	1186	72		A1		2003	0626	1	US 2	001-	1227	0		2	0011	106
UŞ	6902	739			B2		2005	0607									
CA	2454	658			A1		2003	0206									
ΕP	1416	966			A2		2004	0512	:	EP 2	002-	7424	24		2	0020	723
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
JP	2005	5010	43		T		2005	0113	,	JP 2	003-	51514	40		20	0020	723
US	2005	1584	06		A1		2005	0721	1	US 2	005-	8122	3		2	0050	315

US 2005214392 A1 20050929 US 2005-139205 20050526
PRIORITY APPLN. INFO.: US 2001-307588P P 20010723
US 2001-12270 A 20011106
WO 2002-US23508 W 20020723

This invention provides methods and formulations for treating an inflammatory disease or reducing an inflammatory reaction comprising administering a fortified formulation comprising stabilized rice bran derivative and a fortification agent. Preferred rice bran derivs. are rice bran oil and the solubilized fraction of rice bran. Preferred fortification agents are glucosamine derivative, methylsulfonylmethane, yucca concentrate, and grape seed extract

L20 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:504633 CAPLUS

DOCUMENT NUMBER: 137:52423

TITLE: Drugs against articular failure containing amino

sugars and trehalose

DATE

INVENTOR(S): Fukuda, Shiqeharu; Ario, Takeshi; Miyake, Toshio

PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo,

Japan

KIND

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PF	TIENI	NO.			VIII	U	DATE	1	A	PP.	DICHI	TOM	WO.			MID	
						_			-						-		
WC	2002	0514	24		A1		2002	0704	W	0	2001-	JP11	147		2	0011	219
WC	2002	0514	24		A8		2002	0801									-
	W:	KR,	US														
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE,	TR								-					
JF	2002	1938	11		Α		2002	0710	J	P :	2000-	3913	90		2	0001	222
EF	1354	590			A1		2003	1022	E	P :	2001-	9949	73		2	0011	219
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	ŞΕ,	MC,	PT,
		ΙE,	FI,	CY,	TR												
TW	2356	60			В		2005	0711	T	W :	2001-	9013	1898		2	0011	221
US	2004	0389	29		A1		2004	0226	U	S :	2003-	4512	24 .		2	0030	623
PRIORIT	Y APP	LN.	INFO	.:					J	P :	2000-	3913	90		A 2	0001	222
									W	0 :	2001-	JP11	147		W 2	0011	219

AB It is intended to provide compns. which exert an effect of restoring articular failure at a level superior to aminosugars and glycosaminoglycan. This problem is solved by providing drugs against articular failure which contain as the active ingredients an aminosugar and trehalose. The compns. containing aminosugar and trehalose are suitable for use in oral pharmaceutical compns., cosmetics, and foods. A powder composition containing trehalose (Treha) 4, glucosamine 1 parts was prepared for use

in a pharmaceutical, cosmetic, or food composition

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ADDITCATION NO

חאידים

L20 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:903816 CAPLUS

DOCUMENT NUMBER: 136:42843

TITLE: Compositions, kits, and methods for promoting defined

health benefits

INVENTOR(S): Kern, Kenneth Norman; Heisey, Matthew Thomas

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO.
                                                               DATE
    PATENT NO.
                     KIND
                              DATE
                                         _____
                                                               _____
                     _ _ _ _
                             -----
    WO 2001093847
                                         WO 2001-US17714
                                                               20010601
                              20011213
                      A2
    WO 2001093847
                       A3
                              20020425
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
           HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
           LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
           RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
           YU, ZA, ZW, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, CF, CG,
           CI, CM, GA, GN, GW, ML, NE, SN, TD, TG
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
           DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
           BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                              20030410
                                       US 2001-760280
                                                               20010112
    US 2003069202
                       A1
    CA 2408609
                        A1
                              20011213
                                       CA 2001-2408609
                                                               20010601
                              20030312
                                        EP 2001-946030
                                                               20010601
    EP 1289510
                       A2
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                        JP 2002-501420
                                                               20010601
                    {f T}
                              20031125
    JP 2003535126
                       Α
                              20031216
                                         BR 2001-11381
                                                               20010601
    BR 2001011381
                                                           A 20000602
                                         US 2000-586213
PRIORITY APPLN. INFO.:
                                         US 2001-760280
                                                           A 20010112
                                         WO 2001-US17714
                                                           W 20010601
```

The present invention is directed to compns. comprising: (a) a first AB component selected from the group consisting of gelatin, cartilage, amino sugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts and mixts.; and (b) a second component comprising a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. and an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the composition promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a composition as defined herein. Thus, hard lemon candies are prepared by combining the following components as indicated: sugar 200, light corn syrup 63, water 60, lemon flavor glucosamine-HCl 16, and calcium citrate malate 14.9 g.

L20 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:719487 CAPLUS

DOCUMENT NUMBER: 129:315186

TITLE:

Simultaneous determination of monosaccharides and

oligosaccharides by normal-phase HPLC

AUTHOR (S): Kakita, Hirotaka; Kitamura, Takao; Komiya, Katsuo;

Kato, Yoshio

Shikoku Natl. Ind. Res. Inst., AIST, Takamatsu, CORPORATE SOURCE:

761-0395, Japan

Shokuhin Eiseigaku Zasshi (1998), 39(5), 333-340 SOURCE:

CODEN: SKEZAP; ISSN: 0015-6426

PUBLISHER: Nippon Shokuhin Eisei Gakkai

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A rapid and highly sensitive method was developed for the simultaneous determination of reducing monosaccharides and oligosaccharides by normal-phase HPLC with fluorescence detection. The technique of linear gradient

elution on a TSKgel Amide-80 column was more suitable for saccharides separation. The post-column reaction was optimized for fluorometric detection. Under optimum conditions, the detection limits were 0.3-15 ng for the reducing saccharides investigated. The calibration curves were approx. linear in the range of 2000-12.5 pmol for glucose, cellotriose, and cellopentaose. The coefficient of variation for glucose was less than 1%. Application of the method for food anal. was successful.

L20 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:50447 CAPLUS

DOCUMENT NUMBER: 128:162380

TITLE: HPLC separations of a broad spectrum of small

molecular weight analytes on cation-exchange columns

AUTHOR(S): Talmadge, Kenneth W.; Siebert, Christopher J.; Wood,

Roy

CORPORATE SOURCE: Life Science group at Bio-Rad Laboratories, Hercules,

CA, 94547, USA

SOURCE: American Laboratory (Shelton, Connecticut) (1997),

29(24), 37-43

CODEN: ALBYBL; ISSN: 0044-7749

PUBLISHER: International Scientific Communications, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

Aminex HPLC columns, packed with a polymer-based matrix, offer many advantages for the anal. of carbohydrates, alcs., and organic acids in foods and beverages, biochem., biomedical, and biotechnol. applications. The columns allow a variety of sepns. without the disadvantages of bonded-phase silica HPLC. Complicated solvent systems, sample derivatization, and gradient elution schemes are not required for analyses using polymerbased columns. The resins exhibit high pressure stability and pH stability over a wide range. Large mols. elute early in the separation, rather than binding irreversibly to the matrix. This results

in very stable HPLC columns exhibiting high column efficiencies.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1278408 CAPLUS

DOCUMENT NUMBER: 146:6895

TITLE: Articular cartilage injury and tendon lesion curing

stimulators and foods and drinks containing them Matahei, Yoshiharu; Utsuka, Naoaki; Minami, Saburo;

Okamoto, Yoshiharu; Okamura, Yasuhiko

PATENT ASSIGNEE(S): Yaizu Suisan Kagaku Industry Co., Ltd., Japan; Tottori

University

SOURCE: Jpn. Kokai Tokkyo Koho, 25pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

INVENTOR(S):

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2006327979 A 20061207 JP 2005-153013 20050525

PRIORITY APPLN. INFO.: JP 2005-153013 20050525

AB The invention provides of articular cartilage damage and tendon lesion

AB The invention provides of articular cartilage damage and tendon lesion curing stimulators containing collagen peptides and N-acetylglucosamine derived from fishes. Moreover, foods and beverages containing collagen peptides and N-acetylglucosamine derived from fishes are used for promotion of articular cartilage damage curing and tendon lesion curing.

L20 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:578086 CAPLUS

DOCUMENT NUMBER:

145:27047

TITLE:

 $\alpha\text{-Lipoic}$ acid and coenzyme Q10 for control of

obesity

INVENTOR(S):

Hamaura, Mayumi

PATENT ASSIGNEE(S):

Rohto Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 14 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ______ ---------______ JP 2006151909 Α 20060615 JP 2004-347906 20041130 PRIORITY APPLN. INFO.: JP 2004-347906 20041130

AB An peroral composition for control of lipid/fat accumulation in white adipose tissue comprises α -lipoic acid, coenzyme Q10, and amino acids selected from valine, leucine, and/or isoleucine. Optionally, vitamins and other amino acids were also used in the peroral composition

L20 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:192757 CAPLUS

DOCUMENT NUMBER:

144:232118

TITLE:

Beverages containing hyaluronic acid and

N-acetylglucosamine for beauty care

INVENTOR (S):

Kawasaki, Yoshiaki

PATENT ASSIGNEE(S):

Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2006056809 A 20060302 JP 2004-238757 20040818
PRIORITY APPLN. INFO.: JP 2004-238757 20040818

AB The beverages for beauty care contain hyaluronic acid,

N-acetylglucosamine, and optionally, vitamin C. Preferably, the beverages are packaged in portion-type containers. The beverages show long-lasting skin-moisturizing and -conditioning

effects (no data). Acerola-flavored beverages were manufactured

L20 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1345039 CAPLUS

DOCUMENT NUMBER: 144:74832

TITLE: Beverage and additives for wellness INVENTOR(S): Martin, Kenneth A.; Barr, Teresa Leigh

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 6979458 B1 20051227 US 2002-241544 20020911

PRIORITY APPLN. INFO.: US 2002-241544 20020911

AB The invention is an ingestible wellness one time daily dosage made of a large quantity of rapid absorbing glucosamine sulfate, glucosamine

The invention is an ingestible wellness one time daily dosage made of a large quantity of rapid absorbing glucosamine sulfate, glucosamine hydrochloride, and an n-acetyl glucosamine and combinations thereof, a large quantity of chondroitin sulfate, chondroitin-HCl and combinations thereof, a vasodilating sulfonate with at least one Me group, and a buffer to reduce adverse symptoms from large amts. of glucosamine and chondroitin selected from the family of Araliaceae and a vitamin B3, wherein the invention is also a wellness beverage that involves a fluid combined with the ingestible wellness dosage.

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1255782 CAPLUS

DOCUMENT NUMBER: 143:483041

TITLE: Beverage and additive for inflamed tissue INVENTOR(S): Martin, Kenneth A.; Barr, Teresa Leigh

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 4 pp., Cont.-in-part of U.S. Ser. No. 241,542.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
US 6969533	В1	20051129	US 2003-630569	20030730
US 6660308	B1	20031209	US 2002-241542	20020911
PRIORITY APPLN. INFO.:		•	US 2002-241542 A	2 20020911

AB The invention is a beverage involving an ingestible fluid and a

dosage amount of an ingestible composition for treating an inflammatory tissue in

a mammal, involving the inflammatory tissue selected from the group comprising underperfused tissue, inflamed joints, inflamed muscles, wherein the dosage amount has a glucose ingredient, such as glucosamine sulfate, glucosamine hydrochloride, n-acetyl glucosamine, and combinations

thereof; a chondroitin component, such as chondroitin sulfate, chondroitin hydrochloride, and combinations thereof; a member of the family of araliaceae for buffering the ingestion of the glucose ingredient, such as American ginseng, Siberian ginseng, panax ginseng, and combinations thereof; a calcium containing component; and a sulfonate having at least one Me group ingesting the beverage.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:1036832 CAPLUS

DOCUMENT NUMBER:

144:349712

TITLE:

Beautification action of N-acetylglucosamine and

application for cosmeceutical foods

AUTHOR (S):

Ishiwada, Tomoko

CORPORATE SOURCE:

Yaizu Suisankagaku Industry Co., Ltd., Japan

SOURCE:

Food Style 21 (2005), 9(9), 40-42 CODEN: FSTYFF; ISSN: 1343-9502

PUBLISHER:
DOCUMENT TYPE:

Shokuhin Kagaku Shinbunsha Journal: General Review

LANGUAGE:

Japanese

AB A review discussing skin-beautifying effects of N-acetylglucosamine, especially hyaluronic acid production-enhancing effect and skin-moisturizing effect, and its application in cosmetic food, e.g. beverages, is provided.

L20 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:732745 CAPLUS

DOCUMENT NUMBER: TITLE:

143:188842 Subunits of neoculin, a taste-modifying protein

INVENTOR(S):

occurring in the fruit of Curculigo latifolia Abe, Keiko; Asakura, Tomiko; Sorimachi, Hiroyuki; Uenoyama, Tazuko; Nakajima, Kenichiro; Kitamoto,

Katsuhiko; Maruyama, Junichi; Kishi, Mikiya

PATENT ASSIGNEE(S):

Mitsukan Group Corporation, Japan

SOURCE:

PCT Int. Appl., 59 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
	WO 2005073372					A1 20050811			WO 2005-JP1068						20050127			
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
•			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
																	DE,	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
			MR,	ΝE,	SN,	TD,	TG											
	ΕP	1724	341			A1	:	2006	1122	1	EP 2	005-	7041	74		2	0050	127
		R:	DE,	ES,	FR,	GB,	IT											
PRIOR	ZTIS	APP	LN.	INFO	. :					,	JP 2	004-	1925	1	1	A 2	0040	128
										1	WO 2	005-	JP10	58	1	W 2	0050	127

AB The present invention provides a substance having an improved function of modifying the taste sensation, encoding sequences, and a taste sensation-modifying composition containing the above taste sensation-modifying substance. Namely, a heterodimeric protein neoculin comprising the subunits neoculin acidic subunit (NAS) and neoculin basic subunit (NBS)

and having an activity of modifying the taste sensation is provided. A unique taste-modifying activity that converts the sense of sourness to the sense of sweetness occurs in the fruit of the plant Curculigo latifolia, intrinsic to West Malaysia. The active component, known as curculin, is a protein consisting of two identical subunits. The authors have found a new taste-modifying protein, named neoculin, of the same origin. Both chemical anal. and cDNA cloning characterized neoculin as a heterodimeric protein consisting of an acidic, glycosylated subunit of 113 amino acid residues and a basic subunit that is the monomeric curculin itself. Vegetable juice, grapefruit juice, and Sushi ingredient condiment containing neoculin were prepared and demonstrated neoculin's effect on taste enhancement, in particular, suppression of bitterness and sourness, and enhancement of sweetness.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:458291 CAPLUS

DOCUMENT NUMBER: 144:83743

TITLE: Isolation and characterization of Lactobacillus

strains involved in koumiss fermentation

AUTHOR(S): Danova, Svetla; Petrov, Kaloyan; Pavlov, Plamen;

Petrova, Penka

CORPORATE SOURCE: Institutes of Microbiology, Bulgarian Academy of

Sciences, Sofia, Bulg.

SOURCE: International Journal of Dairy Technology (2005),

58(2), 100-105

CODEN: IJDTFQ; ISSN: 1364-727X

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Koumiss is a slightly alc. fermented milk beverage, originally obtained by natural mix starters (lactic acid bacteria and yeast). Seven Lactobacillus strains from lyophilized koumiss were isolated and

identified as L. salivarius, L. buchneri and L. plantarum. The process of lactic acid fermentation caused by koumiss strains was faster (9-13 h) than

that

with other lactobacilli. The conversion ratio of glucose to lactic acid ranged from 47% to 79% and was strain dependent. All strains were resistant to low pH. Three of the strains isolated were viable during prolonged cold storage in fermented milk (3 wk at 4°C).

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:409335 CAPLUS

DOCUMENT NUMBER: 142:451846

TITLE: Composition to enhance joint function and repair

INVENTOR(S): Nelson, Michael

PATENT ASSIGNEE(S): Motion Potion, Inc., USA SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT :	NO.			KIN	D :	DATE			APPL	CAT	ION	NO.		D	ATE	
						-									-		
WO	2005	0419	99		A1		2005	0512	,	WO 2	004-1	JS34	945		2	0041	020
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20041020 **A1** 20050526 US 2004-970786 US 2005113287 P 20031021 US 2003-513379P PRIORITY APPLN. INFO.: The present invention relates to a composition to enhance joint function, reduce inflammation and homocysteine levels, and repair cartilage. The present invention relates to a nutritional supplement comprising a glucosamine-containing constituent, a chondroitin-containing constituent, methylsulfonylmethane, and at least one sulfur-containing amino acid. A preferred sulfur-containing amino acid is taurine. The nutritional supplement can also include folic acid, vitamins B6, B12, C. The nutritional supplement can also include chromium and lipoic acid to improve insulin receptor sensitivity.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:573619 CAPLUS

DOCUMENT NUMBER: 133:168334

Proteoglycan-reduced soft tissue xenografts TITLE:

INVENTOR(S): Stone, Kevin R. PATENT ASSIGNEE(S): Crosscart, Inc., USA PCT Int. Appl., 49 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
WO 2000047131	A1	20000817	WO 2000-US3233	20000208			
W: AU, CA, JP	CV DE	מע בכ	FI, FR, GB, GR, IE, IT,	T.II MC NT.			
PT, SE	CI, DI	, DK, EQ,	F1, FR, GD, GR, IB, II,	DO, ME, ND,			
US 6267786	B1	20010731	US 1999-248336	19990211			
CA 2361579	A1	20000817	CA 2000-2361579	20000208			
EP 1158930	A1	20011205	EP 2000-908532	20000208			
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,			
· IE, FI							
JP 2002536109	T	20021029	JP 2000-598085	20000208			
AU 760424	B2 -	20030515	AU 2000-29857	20000208			
US 2001039459	A1	20011108	US 2001-873975	20010604			
PRIORITY APPLN. INFO.:			US 1999-248336	A 19990211			
			WO 2000-US3233	W 20000208			

AΒ The invention provides an article of manufacture comprising a substantially non-immunogenic soft tissue xenograft for implantation into humans. The invention further provides methods for preparing a soft tissue xenograft by removing at least a portion of a soft tissue from a non-human animal to provide a xenograft; washing the xenograft in saline and alc.; subjecting the xenograft to cellular disruption treatment; and digesting the xenograft with a proteoglycan-depleting factor and/or glycosidase and optionally following with a capping treatment. The invention also provides an article of manufacture produced by the above-identified method of the invention. The invention further provides a soft tissue xenograft for implantation into a human including a portion of a soft tissue from a non-human animal, wherein the portion has extracellular components and substantially only dead cells. The extracellular components have reduced proteoglycan mols. Each of the xenografts of the invention are substantially non-immunogenic and have substantially the same mech. properties as a corresponding native soft tissue.

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS 7 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

2000:110777 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:321397

TITLE: Effect of oral administration of Cellulomonas

flavigena NTOU 1-degraded chitin hydrolysate on

physiological changes in rats

Chen, Shwu-Hwa; Chen, Hsing-Chen AUTHOR (S):

CORPORATE SOURCE: Department of Food Science, National Taiwan Ocean

University, Chi-lung, 202, Taiwan

SOURCE: Food Science and Agricultural Chemistry (1999), 1(3),

186-193

CODEN: FSACFO; ISSN: 1560-4152

PUBLISHER: Chinese Agricultural Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English This research was conducted to determine the physiol. changes of rats fed Cellulomonas flavigena NTOU 1-degraded chitin hydrolyzate. Chitin was prepared from shrimp shell which was decalcified using HCl and then deproteinized by Pseudomonas maltophilia 1-1. The chitin was subsequently hydrolyzed by C. flavigena NTOU 1 and then sterilized to be a chitin hydrolyzate. In the hydrolyzate, some substances were detected, such as N-acetylchitobiose (39 mg/100 mL), 2 unknown oligosaccharides (122 and 106 mg/100 mL), and trace amts. (<7 mg/100 mL) of amino acids, nucleotides, and associated compds. To evaluate the effect of chitin hydrolyzate on the physiol. consequences in rats, 2 trials of animal (Sprague Dawley rats) tests were conducted. In the treatment, rats were fed Purina Chow and chitin hydrolyzate; while in the control, distilled water was used instead of the hydrolyzate. Each test was carried out for 4 wk. At the termination, the concentration of blood plasma total cholesterol in the treated animals was lower than that in the control. While the count of white blood cells in the treated animals was higher than that in the control, the log counts of total anaerobic bacteria in ceca of the 2 groups of animals did not differ. The counts of Bifidobacterium between the 2 groups also did not differ. However, Bacteroides fragilis was more predominant (30%) in the treated animals. Therefore, one should be careful in recommending ingestion of chitohydrolyzate as a health food on clin. grounds.

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS 31 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1998:64729 CAPLUS

DOCUMENT NUMBER:

128:178814

TITLE:

Heterogeneity of the zona pellucida carbohydrate

distribution in human oocytes failing to fertilize in

vitro

Italy

AUTHOR (S):

Talevi, R.; Gualtieri, R.; Tartaglione, G.; Fortunato,

CORPORATE SOURCE:

Dipartimento di Biologia Evolutiva e Comparata, Universita di Napoli "Federico II", Naples, 80134,

Human Reproduction (1997), 12(12), 2773-2780

SOURCE:

CODEN: HUREEE; ISSN: 0268-1161

PUBLISHER:

Oxford University Press

DOCUMENT TYPE: LANGUAGE:

Journal English

The mammalian zona pellucida contains several glycoproteins whose oligosaccharide moieties are known to play a key role in the interaction with spermatozoa. Since zona pellucida defects may represent one of the most likely causes of failed fertilization in human in-vitro reproduction, we have studied the carbohydrate composition and distribution over the human zona pellucida by means of lectins. Donated, not inseminated cumulus-oocyte complexes, from cohorts with high fertilization rates, and fertilization-failed oocytes from cohorts inseminated with proven fertile donor semen, were analyzed using 11 fluorescein-labeled lectins, on deplasticized semi-thin epoxy sections. Results showed that wheat germ agglutinin (WGA), Maclura pomifera (MPA) and Pisum sativum (PSA) bound to the extracellular matrix bordering the zona pellucida-corona radiata interface of cumulus-oocytes complexes, while the zona pellucida was labeled by WGA, Con A (ConA) and PSA. WGA labeling and correlative electron microscopy on the cumulus-oocyte complexes demonstrated that this lectin is a useful tool to trace the cortical granule distribution in the human oocyte. Surprisingly, in the failed-fertilized oocytes the zona pellucida was also labeled by MPA and showed three different patterns: (i) labeling of the zona pellucida outer surface; (ii) uniform labeling; (iii) labeling of an outer zona pellucida layer with variable thickness. Comparative anal. of WGA and MPA labeling on single failed-fertilized oocytes demonstrated that MPA zona pellucida patterns are not related to the cortical reaction. The nature and meaning of the MPA pattern of

failed-fertilized oocytes were discussed in the light of zona pellucida defects impairing sperm receptivity.

REFERENCE COUNT:

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

42

ACCESSION NUMBER: 1997:527758 CAPLUS

DOCUMENT NUMBER: 127:187869

TITLE: Composition for tissues to sustain viability and

biological functions in surgery and storage

INVENTOR(S): Chen, Chung-ho; Chen, Sumi C.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 8 pp., Cont.-in-part of U.S. 5,298,487.

CODEN: USXXAM

DOCUMENT TYPE:

Patent Fnglish

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 5654266	Α	19970805	US 1994-218109	19940328		
US 5298487	Α	19940329	US 1992-833027	19920210		
PRIORITY APPLN. INFO.:			US 1992-833027	A2 19920210		
			US 1989-346700	A3 19890503		

AB A composition composing ketone bodies and/or precursors thereof and an aqueous phosphate-buffered balanced salt solution with citrate, HPO42-, and Ca2+ in a defined concentration ratio is useful as a rich energy source for isolated tissue

and for peripheral tissues under surgery with concurrent suppression of lactic acid formation and accumulation in the cells. Methods, including a mechanism and an associated set of protocols, are provided for making the solution without causing autoclave-elicited caramelization and precipitation in the

manufacturing process. The composition may be used in ocular surgery, general surgery, and topical application, storage, and rinsing of donor tissues prior to transplantation. Thus, an irrigating solution contained Na DL- β -hydroxybutyrate 1.51, KCl 0.75, NaCl 7.71, Na2HPO4.7H2O 0.67, NaH2PO4.H2O 0.07, Na citrate-2H2O 0.59, MgCl2.6H2O 0.24, and CaCl2 0.09 mg/mL (pH 7.3-7.4). The solution was filtered, bottled, sealed under vacuum, and sterilized by autoclaving or by showers of superheated water at 121-123° for 15-20 min and immediately cooled rapidly with showers of water or in water baths in 2 stages, first at 60° and then at 4°, to prevent breakage of glass bottles. Glucose (5.5 mM) may be added to the solution without eliciting autoclave-induced caramelization.

L28 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:128651 CAPLUS

DOCUMENT NUMBER: 124:173976

TITLE: Monosaccharides and myo-Inositol in Commercial Milks AUTHOR(S): Troyano, Esperanza; Villamiel, Mar; Olano, Agustin;

Sanz, Jesus; Martinez-Castro, Isabel

CORPORATE SOURCE: Instituto de Fermentaciones Industriales, Madrid,

28006, Spain

SOURCE: Journal of Agricultural and Food Chemistry (1996),

44(3), 815-17

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Monosaccharides (galactose, glucose, tagatose, 3-deoxypentulose, N-acetylglucosamine, and N-acetylgalactosamine) and myo-inositol were determined by gas chromatog. in different types of market milk (pasteurized,

dried, UHT, and in-container sterilized). Glucose, myo-inositol, and N-acetylhexosamine concns. were similar to those previously found in raw milk and showed no variations due to sample type. Sterilized milk samples were characterized by the presence of tagatose and 3-deoxypentulose and, thus, could be clearly distinguished from UHT samples. The galactose level, which was found to be higher in the samples submitted to stronger thermal treatment, seems to be also a useful indicator for milk classification.

L28 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:229569 CAPLUS

DOCUMENT NUMBER: 110:229569

TITLE: Lectin receptors on the surface of ejaculated

spermatozoa of fertile and sterile humans

AUTHOR(S): Xia, Xingzhong; Sun, Ce; Shen, Zhaowen

CORPORATE SOURCE: Shanghai Inst. Biochem., Acad. Sin., Shanghai, Peop.

Rep. China

SOURCE: Shengwu Huaxue Yu Shengwu Wuli Xuebao (1988), 20(6),

599-606

CODEN: SHWPAU; ISSN: 0582-9879

DOCUMENT TYPE: Journal LANGUAGE: Chinese

Lectin receptors on the surface of human ejaculated spermatozoa were studied with immuno-enzymic techniques. Pea lectin (PSL), Con A and peanut agglutinin (PNA) predominantly bind to the acrosomal cap region of the plasma membrane of human spermatozoa. Wheat germ agglutinin (WGA) strongly reacts with carbohydrates of the postacrosomal region and middle piece membrane, whereas rice germ lectin (RGL) binds weakly to the same domains. Sialic acid and N-acetylglucosamine are known as hapten inhibitors of WGA, while RGL specifically reacts only with N-acetylglucosamine residues of glycoconjugates. Enzyme-labeled Ricinus communis agglutinin (RCA) stains the entire sperm surface. Receptors for soybean agglutinin (SBA) are present in the midregion of the sperm head. The lectin binding patterns in sterile spermatozoa are different from those of normal persons. These infertile spermatozoa have obviously lost their binding sites for PSL, Con A, and PNA in the anterior region of sperm heads and are also no longer stained by RCA in the this region, indicating a decrease of saccharides and a change in structure in the acrosomal region of sterile spermatozoa. The distribution of WGA receptors in sterile spermatozoa is similar to that in fertile spermatozoa, but shows a slight decline in WGA receptor d. No essential differences in binding pattern for RGL and SBA were observed between fertile and sterile spermatozoa, suggesting that the N-acetylglucosamine and N-acetylgalactosamine residues on human spermatozoa are possibly not relevant to the binding function in sperm-egg interaction in humans.

L28 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:48270 CAPLUS

DOCUMENT NUMBER: 100:48270

TITLE: Chitinase is an inducible enzyme in Beauveria bassiana

AUTHOR(S): Smith, Rebecca J.; Grula, E. A.

CORPORATE SOURCE: Dep. Microbiol., Oklahoma State Univ., Stillwater, OK,

74078, USA

SOURCE: Journal of Invertebrate Pathology (1983), 42(3),

319-26

CODEN: JIVPAZ; ISSN: 0022-2011

DOCUMENT TYPE: Journal LANGUAGE: English

AB The sterilization of chitin by autoclaving or boiling causes the release of D-glucosamine and N-acetylglucosamine from the macromol. and these solubilized components actually function as the inducers for synthesis of chitinase in B. bassiana. The insol. macromol. is not an inducer of chitinase since sterilization by dry heat or CHCl3 will not bring about release of the amino sugars or induction of the

enzyme. Free glucosamine, N-acetylglucosamine, and chitobiose are all good inducers of chitinase. The most sustained synthesis of the enzyme occurs in an autoclaved chitin-salts medium.

L28 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1971:115883 CAPLUS

DOCUMENT NUMBER: 74:115883

TITLE: N-Acyl derivaties of aminoqlucose for treating

degenerative articular disorders

PATENT ASSIGNEE(S): Rotta Research Laboratorium

SOURCE: Fr. Demande, 9 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2016182	A5	19700508	FR 1969-28696	19690821
FR 2016182	B1	19730112	•	
DE 1792346	A	19711111	DE 1967-1792346	19680822
DE 1792346	B2	19800228		
DE 1792346	C3	19801023		
US 3697652	A	19721010	US 1969-851446	19690819
PRIORITY APPLN. I	NFO.:		DE 1967-1792346	A 19680822

Oral, rectal, or parenteral administration of 200-500 mg doses of N-acetylglucosamine, with or without 0.2-4 equivalent of NaI or Na2SO4, in pharmaceutically acceptable compns. such as tablets, lozenges, capsules, suppositories, syrups, or aqueous solns. gave favorable, lasting results, with low toxicity. Aqueous solns. are preferred, since they can be stabilized by heat sterilization. Examples (9) of formulations for each type of composition are given.

L28 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1958:114605 CAPLUS

DOCUMENT NUMBER: 52:114605 ORIGINAL REFERENCE NO.: 52:20383e-q

TITLE:

Development of lysozyme-resistance in Micrococcus lysodeikticus and its association with an increased

O-acetyl content of the cell wall

Brumfitt, W.; Wardlaw, A. C. AUTHOR (S):

CORPORATE SOURCE: Wright-Fleming Inst., London

SOURCE: Nature (London, United Kingdom) (1958), 181, 1783-4

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The lysozyme sensitivity of M. lysodeikticus cell walls was artificially altered by changing their O-acetyl content by the use of chemical procedures. Resistant cell walls were made sensitive by removing O-acetyl groups with NaOH, and, conversely, the cell walls were rendered resistant by acetylation with Ac20 and pyridine. Cells incubated in buffers over the pH range 7-11.4 resulted in progressive decrease of O-acetyl content and increasing lysozyme sensitivity with increasing pH. These chemically induced changes are not transmitted as they are in natural selection. hypothesis is proposed that lysozyme splits a 1-4 link between N-acetylmuramic acid and N-acetylglucosamine.